

FIG.1

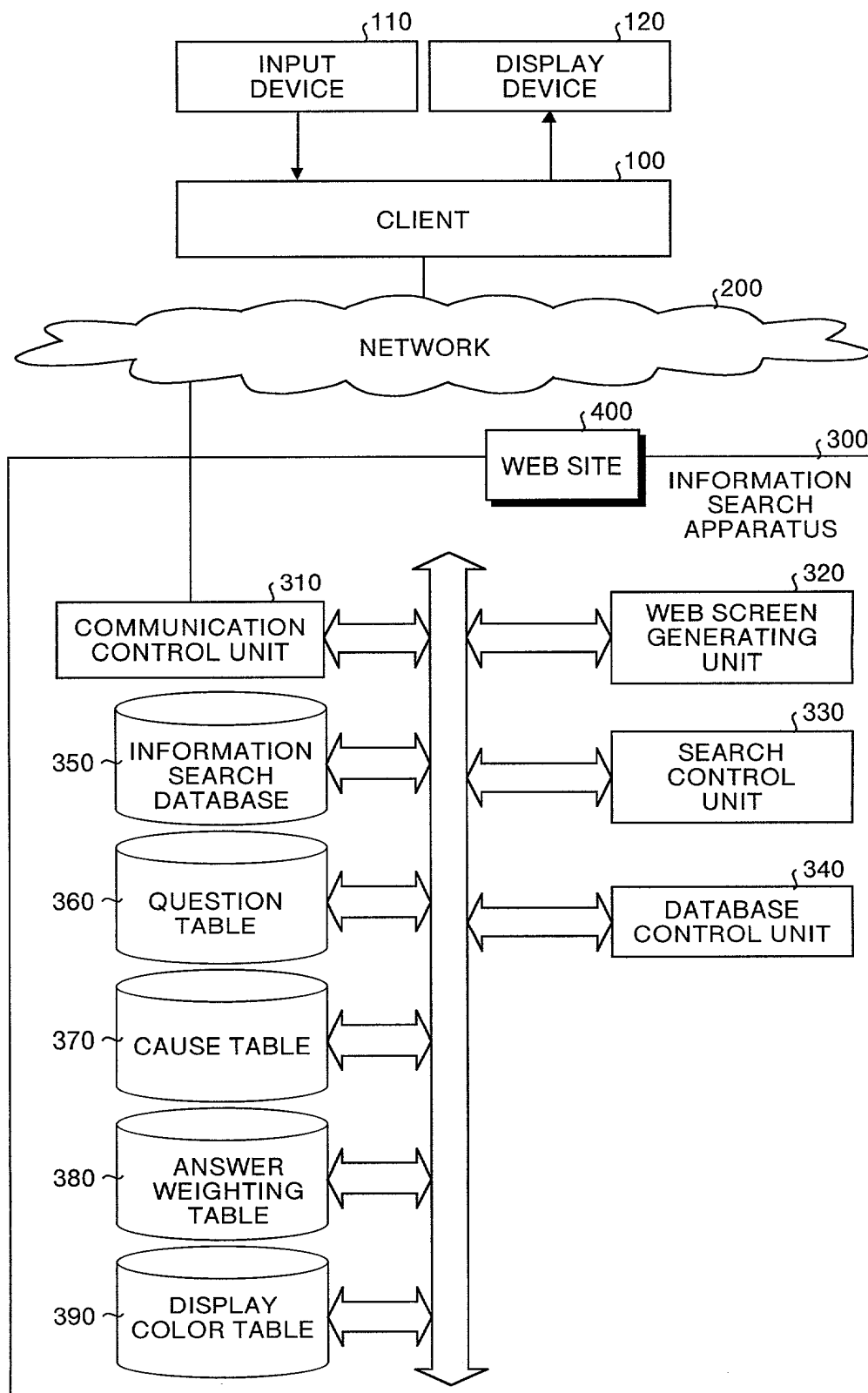


FIG.2

350

		QUESTION CODE									
		1	2	3	4	5	6	7	8	9	10
CAUSE CODE	A	1	0	4	2	-1	0	0	0	0	0
	B	1	1	0	2	-1	0	1	0	2	0
	C	1	-1	2	2	1	0	0	0	1	1
	D	1	1	0	1	0	4	0	2	1	0
	E	0	1	0	0	-1	1	4	2	1	0
	F	1	1	0	0	-1	2	2	4	2	0
	G	1	1	0	0	-1	2	1	2	1	1
	H	0	1	1	4	-1	0	0	1	2	1
	I	1	0	0	1	-1	4	2	1	0	0
	J	0	0	1	1	0	1	2	4	2	1

FIG.3

360

QUESTION CODE	QUESTION
1	IS DEFICIENCY CAUSED AT HIGH TEMPERATURE?
2	IS DEFICIENCY CAUSED AT LOW TEMPERATURE?
3	IS PULSE WIDTH OUT OF SPECIFICATIONS?
4	IS DEFICIENCY CAUSED AT HIGH VOLTAGE?
5	IS DEFICIENCY CAUSED AT LOW VOLTAGE?
6	IS DEFICIENCY CAUSED AT STANDARD VOLTAGE?
7	IS INTERMITTENT FAILURE OCCURRING?
8	IS CLOCK SIGNAL DISTORTED?
9	IS THERE ANY NOISE IN OUTPUT DATA?
10	IS THERE ANY NOISE AT POWER SOURCE?

FIG.4

370

CAUSE CODE	CAUSE
A	POOR CONTACT AT BONDING WIRE
B	ERROR IN TUNNEL OXIDE FILM
C	HIGH IMPEDANCE
D	HIGH VOLTAGE OUT OF SPECIFICATION
E	LOW VOLTAGE OUT OF SPECIFICATION
F	NORMAL VOLTAGE OUT OF SPECIFICATION
G	SHORTAGE OF CAPACITANCE OF CAPACITOR
H	CHARGE LOSS
I	POOR CONTACT AT SOCKET
J	SHORTAGE OF NOISE MARGIN AT POWER SOURCE

FIG.5

380

ANSWER	WEIGHT (ANSWER VALUE)
YES	1
NO	-1
UNKNOWN	0

FIG.6

390

JUDGED VALUE	DISPLAY COLOR
5 OR LESS	BLUE
6 OR 7	YELLOW
8 OR GREATER	RED

FIG.7

350

		QUESTION CODE									
		1	2	3	4	5	6	7	8	9	10
CAUSE CODE	A	1	0	4	2	-1	0	0	0	0	0
	B	1	1	0	2	-1	0	1	0	2	0
	C	1	-1	2	2	1	0	0	0	1	1
	D	1	1	0	1	-1	4	0	2	1	0
	E	0	1	0	0	0	1	4	2	1	0
	F	1	1	0	0	-1	2	2	4	2	0
	G	1	1	0	0	-1	2	1	2	1	1
	H	0	1	1	4	-1	0	0	1	2	1
	I	1	0	0	1	-1	4	2	1	0	0
	J	0	0	1	1	0	1	2	4	2	1
FIRST ANSWER VALUE			1	1			-1				0

350

		QUESTION CODE									
		1	2	3	4	5	6	7	8	9	10
CAUSE CODE	A	1	0	4	2	-1	0	0	0	0	0
	B	1	1	0	2	-1	0	1	0	2	0
	C	1	-1	2	2	1	0	0	0	1	1
	D	1	1	0	1	-1	4	0	2	1	0
	E	0	1	0	0	0	1	4	2	1	0
	F	1	1	0	0	-1	2	2	4	2	0
	G	1	1	0	0	-1	2	1	2	1	1
	H	0	1	1	4	-1	0	0	1	2	1
	I	1	0	0	1	-1	4	2	1	0	0
	J	0	0	1	1	0	1	2	4	2	1
FIRST ANSWER VALUE		1	1			-1					0

FIG.9

350

		QUESTION CODE									
		1	2	3	4	5	6	7	8	9	10
CAUSE CODE	A	1	0	4	2	-1	0	0	0	0	0
	B	1	1	0	2	-1	0	1	0	2	0
	C	1	-1	2	2	1	0	0	0	1	1
	D	1	1	0	1	-1	4	0	2	1	0
	E	0	1	0	0	0	1	4	2	1	0
	F	1	1	0	0	-1	2	2	4	2	0
	G	1	1	0	0	-1	2	1	2	1	1
	H	0	1	1	4	-1	0	0	1	2	1
	I	1	0	0	1	-1	4	2	1	0	0
	J	0	0	1	1	0	1	2	4	2	1
FIRST ANSWER VALUE		1	1			-1					0
SECOND ANSWER VALUE					0		1	-1	1	1	

FIG.10

350

		QUESTION CODE										JUDGED VALUE
		1	2	3	4	5	6	7	8	9	10	
CAUSE CODE	A	1	0	4	2	-1	0	0	0	0	0	
	B	1	1	0	2	-1	0	1	0	2	0	4
	C	1	-1	2	2	1	0	0	0	1	1	
	D	1	1	0	1	-1	4	0	2	1	0	10
	E	0	1	0	0	0	1	4	2	1	0	
	F	1	1	0	0	-1	2	2	4	2	0	9
	G	1	1	0	0	-1	2	1	2	1	1	7
	H	0	1	1	4	-1	0	0	1	2	1	
	I	1	0	0	1	-1	4	2	1	0	0	
	J	0	0	1	1	0	1	2	4	2	1	
FIRST ANSWER VALUE		1	1			-1					0	
SECOND ANSWER VALUE					0		1	-1	1	1		

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FIG.11

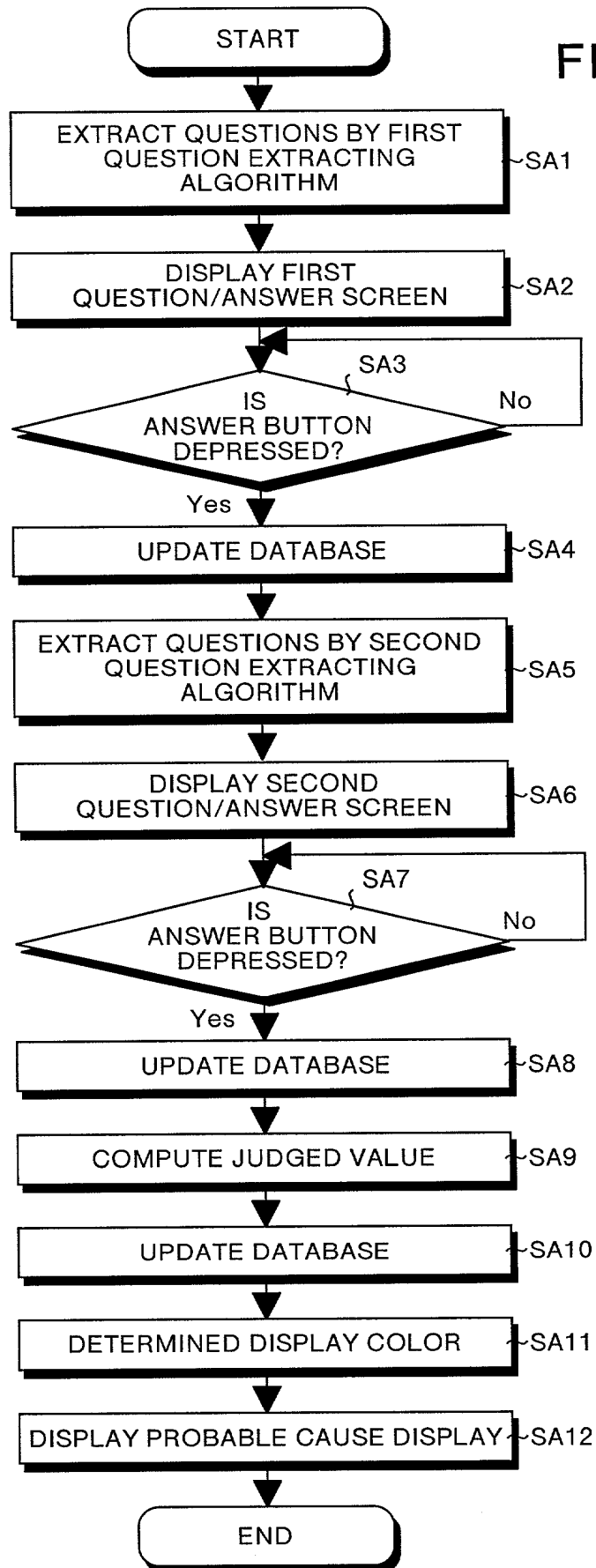


FIG.12

410

IN ORDER TO NARROW CAUSES OF MEMORY TROUBLE, CHOOSE
ONE OF THREE ALTERNATIVES FOR EACH OF THE FOLLOWING
QUESTIONS

QUESTIONS	YES	NO	UNKNOWN
1. IS DEFICIENCY CAUSED AT HIGH TEMPERATURE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. IS DEFICIENCY CAUSED AT LOW TEMPERATURE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. IS DEFICIENCY CAUSED AT LOW VOLTAGE?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. IS THERE ANY NOISE AT POWER SOURCE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

AFTER MARKING THE CORRESPONDING BOXES, PLEASE
DEPRESS THE ANSWER BUTTON

411 ~

ANSWER

FOETED 1192250

FIG.13

420

IN ORDER TO NARROW CAUSES OF MEMORY
TROUBLE, CHOOSE ONE OF THREE ALTERNATIVES
FOR EACH OF THE FOLLOWING QUESTIONS

QUESTIONS	YES	NO	UNKNOWN
4. IS DEFICIENCY CAUSED AT HIGH VOLTAGE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. IS DEFICIENCY CAUSED AT STANDARD VOLTAGE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. IS INTERMITTENT ERROR OCCURRING?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. IS CLOCK SIGNAL DISTORTED?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. IS THERE ANY NOISE IN OUTPUT DATA?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AFTER MARKING THE CORRESPONDING BOXES, PLEASE
DEPRESS THE ANSWER BUTTON

421

ANSWER

FIG.14

430

FOLLOWINGS ARE PROBABLE CAUSES OF MEMORY TROUBLE
PLEASE TAKE ADEQUATE ACTION

CAUSE CODE	CAUSE	JUDGED VALUE	
D	HIGH VOLTAGE OUT OF SPECS	1 0	(DISPLAYED IN RED)
F	NORMAL VOLTAGE OUT OF SPECS	9	(DISPLAYED IN RED)
G	ERROR IN TUNNEL OXIDE FILM	7	(DISPLAYED IN YELLOW)
B	SHORTAGE OF CAPACITOR	4	(DISPLAYED IN BLUE)

FIG.15

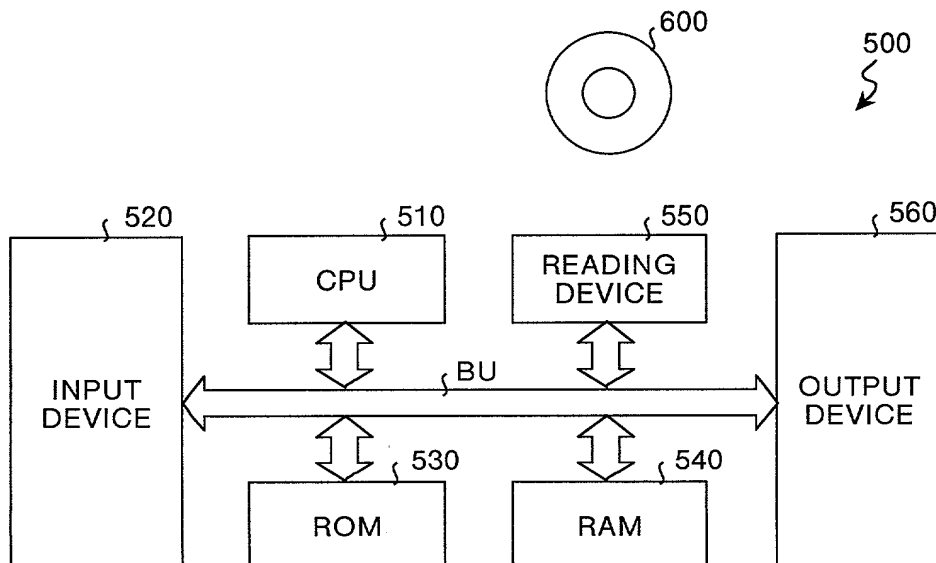


FIG.16

10

<div>SYMPTONS</div> <div>CAUSE</div>	SYMPTON 1	SYMPTON 2	SYMPTON 3		• • •
CAUSE A (SHORTAGE OF CAPACITOR)	DEFICIENCY AT HIGH VOLTAGE	DEFICIENCY AT LOW VOLTAGE	DEFICIENCY AT HIGH TEMPERATURE		• • •
CAUSE B (MEMORY CELL LEAKAGE)	DEFICIENCY AT HIGH VOLTAGE	DEFICIENCY AT LOW VOLTAGE	DEFICIENCY AT HIGH TEMPERATURE		• • •
CAUSE C (CROSS TALK)	DEFICIENCY AT HIGH VOLTAGE	DEFICIENCY AT LOW VOLTAGE	NOISE AT POWER SOURCE		• • •

TOP SECRET 4492660